

P1033

**COURSES IN SURVEY RESEARCH**  
**UNIVERSITY OF MINNESOTA**  
**1989-90**

**Minnesota Center for Survey Research**  
**University of Minnesota**  
**July 1989**

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This directory was compiled and printed by:  
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The University of Minnesota is committed to the policy that all persons shall have equal access to its programs, facilities, and employment without regard to race, religion, color, sex, national origin, handicap, age, veteran status, or sexual orientation.

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## INTRODUCTION

There are many courses at the University of Minnesota that address methods of survey research. The following list includes only those courses in which at least 25 percent of the primary focus is on survey research. This information on courses has been assembled by the Minnesota Center for Survey Research (MCSR) at the University of Minnesota. For further information on the classes, call the departmental contact, the instructors, or MCSR.

Readers are urged to confirm the scheduling of course offerings.

### NOTES:

- # Indicates that the consent of instructor is required to register for the course.
- () Percent of time spent on survey research will be shown at the end of the course description in parentheses.

## **COURSES LISTED BY FIELD OF INSTRUCTION**

### **ADULT AND TEACHER EDUCATION**

Curriculum and Instruction, College of Education

Departmental contact: Bruce Dalgaard, Professor and Associate Chair, 625-6372

Educ 5605    Research Topics: International Development  
Education

Joint Day/Extension

Winter Quarter '90

Empirical research conducted in developing societies relating formal and nonformal education to national development in social, cultural, political, and economic sectors. Cogan. (40%)

### **AGRICULTURAL AND APPLIED ECONOMICS**

College of Agriculture

Departmental contact: Ben Senauer, Professor, 625-5724.

AgEc 5550    Food Marketing Economics

Joint Day/Extension

Prereq. AgEc 3101

Winter Quarter '90

Economics of food marketing in United States. Covers food consumption trends; consumer food behavior; food expenditure and consumption data; consumer survey methodology; the food distribution and retailing system; food policy issues related to food marketing. Students pursue individual and group projects. Meets concurrently with FSCN 5474. Senauer, Asp. (25%)

## AGRICULTURE, FORESTRY, AND HOME ECONOMICS

Office of Special Programs\*

Departmental contact: Richard Krueger, Professor and Extension Specialist, 624-2221.

AgEd 5247 Evaluating Extension Education: varies  
Special Services  
Prereq. basic evaluation course  
Summer Session '90 (One-week workshop)

Under this general course number different topics may be covered each year. In one year the topic may be exclusively telephone and mail survey methods; another year will cover focus groups; a third year may cover market research. Meets concurrently with HEEd 5247. Krueger. (Up to 100%)

## AGRONOMY AND PLANT GENETICS

College of Agriculture

Departmental contact: Vernon B. Cardwell, Professor, 625-6754.

Agro 5055 Methods in Farming Systems Research and Extension  
Day School  
Winter Quarter '90

Introduction to theory and practice of interdisciplinary and holistic approaches to complex farm, rural family, and community problems. Techniques in problem identification and development of desirable and feasible alternatives appropriate for domestic and international situations. Cardwell, Plihal, Leske. (35%)

\* Note: Theses courses are offered at non-standard times and are mostly attended by Extension agents.

## ANTHROPOLOGY

College of Liberal Arts

Departmental contact: Frank C. Miller, Chair, 625-3400.

Anth 5301 Advanced Method and Theory in Archaeology  
Joint Day/Extension  
Prereq. Anth 3111 or #  
Spring Quarter '90

Advanced survey of contemporary theoretical and methodological issues and approaches in archaeology. Hastorf. (25%)

## BIOSTATISTICS

School of Public Health

Departmental contact: Margaret Andrews, Principal Secretary, Division of Biostatistics, 624-4655.

PubH 8422 Sampling Theory  
Joint Day/Extension  
Prereq. PubH 5454, PubH 5459 or equiv  
Spring '90

Mathematical and statistical aspects of sampling human populations with different plans and methods including ratio and regression estimation. Optimal design of analytical surveys and variance estimation. Longitudinal estimation. (100%)

## EDUCATIONAL PSYCHOLOGY

College of Education

Departmental contact: Wayne Welch, Professor, 624-4095.

EPsy 5243 Practicum: Instruments and Procedures for Evaluation  
Day School  
Prereq. EPsy 5221, EPsy 5240  
Winter Quarter '90

Development of curriculum evaluation instruments and procedures; introduction to methods and theories; focus on identification of evaluation problems, development and implementation of techniques for their solution. Welch. (50%)

## EPIDEMIOLOGY

School of Public Health

Departmental contact: Dr. Henry Blackburn, Head, 624-0477.

PubH 5396 Epidemiologic Survey Methods

Day School

Prereq. 3 qtrs. biometry/stats, 1 qtr. epidem.

Fall Quarter '90

Survey methods for students in epidemiology; sampling design, monitoring, questionnaire design, interviewing, etc. Folsom. (100%)

## FAMILY SOCIAL SCIENCE

College of Home Economics

Departmental contact: Katherine Scheffler, Associate Administrator, 625-8771.

FSoS 5240 Evaluation of Family Interventions

Joint Day/Extension

Fall Quarter '89

Focus is on evaluation research that is theory based and has practical implications. Alternative evaluation approaches, including the qualitative and quantitative methods, will be reviewed. Course requirements include designing an evaluation project on some type of family intervention. Patton.

FSoS 5205 Introduction to Family Research Methods

Day School

Prereq. FSoS 3260 and FSoS 5200

Winter Quarter '90

Logic and philosophy of scientific method. Family research questions and objectives, standards for evaluating family research, techniques of data gathering (qualitative and quantitative methods), analysis, reporting and writing. Needle.

FSoS 8266 Family Research Methodology I

Day School

Prereq. FSoS 8255

1990-91

Various research approaches, research design, and instrument development used to study the family. Students design and conduct pilot research projects. Olson.

## FOOD SCIENCE AND NUTRITION

College of Home Economics

FSCN 5474 Food Consumption Economics

Cross listed with AgEc 5550. See Agricultural and Applied Economics for course description.

## FOREST RESOURCES

College of Natural Resources

Departmental contact: Alan R. Ek, Professor and Department Head, 624-3400.

FR 5200 Aerial Photo Interpretation

Day School

Winter '90

Types, characteristics, procurement, preparation, viewing, and interpretation of color, black and white, and color infrared aerial photographs; basic aerial photography; introduction to mapping; applications to resource surveys. Ahearn. (100%)

FR 5212 Natural Resources Inventory

Day School

Prereq. AgET 3030 or equiv computer programming course with FORTRAN or BASIC language, Math 1142 or Math 1211, Stat 3081 or Stat 5021

Spring Quarter '90

Measurement of stand variables, forest products, forest growth and yield. Elementary statistics. Sampling methods for estimating characteristics of natural resources and resource use for management decision making. Lecture and laboratory. Burk. (100%)

FR 5255 Forest Resources Survey Design  
Day School  
Prereq. FR 5212, Stat 5021  
Spring Quarter '90

Advanced forest measurements, sampling, and survey design concepts and practices. Ek. (100%)

FR 5262 Remote Sensing of Natural Resources  
Day School  
Winter Quarter '90

Introduction to remote sensing for natural resource inventories, land use analyses, and environmental monitoring activities; photographic, thermal, multispectral, and radar sensing procedures; airborne and satellite systems; visual and computer-assisted analysis techniques; oriented toward an interdisciplinary audience. Ahearn. (25%)

FR 5412 Advanced Remote Sensing  
Day School  
Prereq. FR 5220  
Spring Quarter '90

Working knowledge of quantitative remote sensing. Both theoretical basis and practical aspects, including energy-matter interactions, radiation measurements and sensors, and digital image analysis. Bauer. (60%)

## GEOGRAPHY

College of Liberal Arts  
Departmental contact: Helga Leitner, Associate Professor, 625-9010.

Geog 5701 Field Research  
Day School  
Spring Quarter '90

Research design of empirical studies. Survey and case study research. Methods of data collection: design and reliability of various forms of questionnaires, observational methods, content analysis. Data analysis: data screening, simple statistical analysis. Leitner, Weil. (30%)

## HUMPHREY INSTITUTE OF PUBLIC AFFAIRS

Departmental contact: Karen Schuster, Administrative Secretary, 625-3497.

PA 5310 Policy and Evaluation Research  
Day School  
Prereq. #  
Winter Quarter '90

Varieties of quantitative and qualitative methods for use in policy analysis, formulation, and evaluation; alternative frameworks for understanding policy. Measurement, experimental design, survey research, evaluation research, fieldwork. Patton, Eustis. (25%)

## INDUSTRIAL RELATIONS

Carlson School of Management  
Departmental contact: Dr. Dennis A. Ahlburg, Director of Graduate Studies, 624-2500.

IR 8001 Introduction to Quantitative Methods and Techniques for Industrial Relations  
Day School  
Offered every quarter (Fall and Spring quarters meet in the evening. Fall Quarter '89 will be IR 8000, Section 1.)

Industrial relations problems identified. Application of descriptive and inferential statistics including probability, hypothesis testing, confidence intervals, analysis of variance, and bivariate linear regression and correlation. Introduction to computer software, hardware, for problem solutions and exercises. Ahlburg, Keane, McCall, Noe. (25%)



IR 8011 Intermediate Quantitative Methods and Techniques for Industrial Relations  
Day School  
Prereq. Stat 5021 or IR 8001  
Offered every quarter (Winter Quarter meets in the evening. Fall Quarter '89 will be IR 8000E, Section 90.)

Theory and applications of alternative quantitative methods and techniques in the formulation and analysis of various industrial relations problems and practices. Cases, problem sets, and computer exercises. Ahlburg, Keane, McCall, Noe. (25%)

## JOURNALISM AND MASS COMMUNICATION

College of Liberal Arts

Departmental contact: Hazel Dicken-Garcia, Director of Graduate Studies, 625-4054.

Jour 5501 Communication and Public Opinion I  
Day School  
Fall Quarter '89, Spring Quarter '90  
Extension Winter Quarter '90  
Prereq. 16 credits in social science

Theories of the communication process and of persuasion and attitude change. Functions of interpersonal and mediated communication. Tims. (30%)

Jour 5531 Communication and Public Opinion II  
Day School  
Prereq. Jour 5501 or Soc 5355  
Winter Quarter '90

Advanced study of theories and research findings on opinion formation, persuasion, diffusion of information. Social science contributions to studies of the process and effects of mass communication. (50-75%)

Jour 8001 Seminar: Mass Communication Research  
Day School  
Prereq. intro statistics  
Winter Quarter '90

Social scientific methods of inquiry used in the study of mass communication processes, effects and messages. Wackman. (50%)

Jour 8102 Mass Communication Research in Action  
Day School  
Winter Quarter '90

Applied communication research methods. Survey of techniques used for the study of audiences, messages, and communication campaign effectiveness. Emphasis on industry applications. Tims. (50%)

Jour 8510 Seminar: Mass Communication Research  
Day School  
Prereq. statistics  
Spring Quarter '90

Advanced research design and analysis. Emphasis on longitudinal designs and nonrecursive causal models. Tims. (75%)

Jour 8516 Seminar: Communications Analysis  
Day School  
Prereq. course in statistics or #  
Spring Quarter '90

Research designs; procedures for quantitative studies of media control, content, audiences, and effects; structural models for mass media research; relationships between research and decision making. Soley. (50%)

## MARKETING

Carlson School of Management

Departmental contact: Michael Houston, Professor and Chair, 625-2075.

Mktg 3010 Buyer Behavior and Marketing Analysis  
Joint Day/Extension  
Prereq. DSci 1050 and Mktg 3000 or equiv, and at least 90 credits completed or in progress  
Offered every quarter

Identifying and applying secondary and primary data to solve marketing problems. Special consideration is given to consumer and organizational buyer behavior. Topics include survey and experimental research techniques, market segmentation, data analysis, behavior concepts and processes, consumer and organizational decision-making models, and managerial applications of these methods. Childers, John. (30%)

Mktg 8051 Marketing Research  
Day School and Extension  
Prereq. basic statistics and grad.  
Offered every quarter (day or evening)

Graduate level of survey research methods. Childers, Loken, D. John. (30%)

## POLITICAL SCIENCE

College of Liberal Arts  
Departmental contact: John Sullivan, Professor, 624-4305.

Pol 5769 Political Polling  
Day School  
Prereq. Pol 3766, or Pol 3796, or Pol 5737, or Pol 5738, or Pol 5767, or Jour 3796  
(Not offered '89-'90)

The use of polling in political campaigns; assessing candidate images; sample selection; questionnaire construction; impact of question wording; interviewing techniques; telephone polling; analysis of poll data. Sullivan. (95%)

## PROFESSIONAL DEVELOPMENT AND CONFERENCE SERVICES

Continuing Education and Extension

Departmental contact: Wanda Lee, Secretary, 625-3465.

41-30 Designing Questionnaires and Surveys  
Earl Brown Center  
\$130 (including lunch and materials)  
November 2, all day  
Scheduled quarterly, call for information

This course helps you construct reliable and valid questionnaires and surveys. Topics include the strengths and weaknesses of surveys, components of a good questionnaire, and differences between needs assessments and evaluation summaries. How to write effective questions, prepare an efficient format, set up response alternatives, conduct the study, and prepare responses for computer analysis. Matross. (100%)

## RHETORIC

College of Agriculture

Departmental contact: Earl E. McDowell, Professor, 624-3657.

Rhet 5500 Research in Communication Strategies  
Day School  
Fall Quarter '89

Designed to acquaint students with the fundamental terminology of survey and experimental research. The major focus is on cross-sectional and longitudinal survey designs. McDowell. (80%)

## SOCIAL WORK

College of Home Economics

Departmental contact: David Hollister, Director, 624-5888.

SW 8991 Seminar on Research  
Day School  
Fall Quarter '89

First in a series of advanced research methods in social research. The course focuses on fundamental concepts and skills central to the research process, including concepts which are particularly important to survey research. Jones. (40%)

SW 8993 Seminar on Research  
Day School  
Prereq. SW 8991, SW 8992  
Spring Quarter '90

Third in a series of advanced research methods in social research. Moon. (60%)

## SOCIOLOGY

College of Liberal Arts

Departmental contact: Katherine Simon Frank, Coordinator of Undergraduate Advising, 624-7326 or 624-4300 or Don McTavish, Professor, 624-4075.

Soc 3801, 3802, 3803 Sociological Methods I, II, III

Day School and Extension

Prereq. basic algebra or Math 0009 (and prior parts of the sequence)

The three-quarter sequence is offered twice a year, starting in Fall and Winter quarters. Soc 3801 is also offered Spring Quarter '90. Extension sequence offered once, starting Fall Quarter '89.

The sequence deals with the statistical analysis of data (including computer use, typically of survey data, and research design). During the sequence students conduct surveys and analyze existing survey data, deal with design topics relevant to social surveys and other related methods. (Survey research focus varies with the part of the sequence and instructor.) R. Anderson, Leik, McTavish. (50% on average)

Soc 5801 Computer Methods in Social Research

Day School

Spring Quarter '90

Basic concepts of information processing for social science research; elementary computer programming; practice in the use of computers for data analysis in social science; selected problems of computer usage in sociology. R. Anderson. (25%)

Soc 5821 Evaluation Research

Day School

Prereq. Soc 3801, Soc 3802, Soc 3803

Fall Quarter '89

Evaluation methodology, steps in conducting evaluations of education and social action programs; special problems in evaluation research; differences between evaluation research and basic research. Preparation of students to conduct evaluation research. Anderson. (50%)

Soc 8801, 8802, 8803 Recent Developments in Sociological Research

Day School

Prereq. graduate standing and #

(not offered '89-'90)

This sequence of seminars focuses on new methods and analytic strategies for social research. Topics are announced when the sequence is offered. Leik, McTavish. (% varies)

Soc 8811 Methods of Social Research

Day School

Prereq. Soc 3802, Soc 3803

Fall Quarter '89

Survey research methods; advantages and limitations of methods when applied to specific types of problems. Reynolds. (33%)

Soc 8812 Intermediate Statistics for Sociologists

Day School

Prereq. Soc 8811

Winter Quarter '90

Intermediate-level bivariate and multivariate statistics used in the analysis of survey data. This is part of the graduate sequence, following 8811. Knoke. (33%)

Soc 8813 Data Analysis

Day School

Prereq. Soc 8812 or #

Spring Quarter '90

Application of multivariate techniques using the computer. Factor analysis, methods of causal analysis, elementary stochastic models, and problems in measurement. Knoke. (75%)

Soc 8816 Seminar: Design of Qualitative Research

Day School

Prereq. #

Fall Quarter '89

Introduction to the techniques of qualitative research. Discussion of methodological issues, presentation and discussion of ongoing field projects. Fine. (75%)

Soc 8817, 8818 Fieldwork and Laboratory Training in Social Research

Day School

Soc 8817 Winter Quarter '90

Soc 8818 Spring Quarter '90

Direct experience in the conduct of research in field and laboratory settings. It involves a variety of research techniques. R. Anderson. (75%)

Soc 8831, 8832, 8833 Measurement

Day school

Offered periodically, see catalog

Nature of measurement and its role in theory and research, measurement models and scaling techniques including various survey-style scaling approaches; special problems in measurement analysis. R. Anderson. (25%)

SPEECH-COMMUNICATION

College of Liberal Arts

Departmental contact: David Rarick, Associate Professor, 624-9349 or Donald Browne, 624-5800.

Spch 8201 Seminar in Survey Research in Speech Communication

Day School

Prereq. Jour 8001 or #

To be announced

Basic methods of survey research (polls, interviewing, use of survey techniques). Each student conducts a small scale survey relevant to own interests in the field of communication. Rarick. (100%)

## STATISTICS

College of Liberal Arts

Departmental contact: Frank Martin, Associate Professor,  
625-4214.

Stat 5201     Sampling Methodology in Finite Populations  
Day School  
Prereq. Stat 3091 or Stat 5021 or Stat 5121, or #  
Winter Quarter '90

Simple random, systematic, stratified, and unequal probability sampling. Ratio and regression estimation. Multistage and cluster sampling. Lorr. (100%)

Stat 5211     Theory of Sample Surveys  
Day School  
Prereq. Stat 5122 or Stat 5133  
(Offered when feasible)

Mathematical treatment of survey sampling, including stratified and multistage sampling, models for nonsampling errors. (100%)

Stat 8931     Advanced Topics in Statistics  
Sampling theory offered once a year by arrangement and schedule of interest.  
Prereq. Stat 5131, Stat 5132, Stat 5133 and Stat 5201 or equiv.  
Typically limited to graduate standing in statistics.  
Fall Quarter '89

Topic is Bayesian Categorical Data Methods. Dickey.

## VOCATIONAL AND TECHNICAL EDUCATION

College of Education

Departmental contact: George Copa, Chair, 624-1221.

VoEd 5200     Evaluation of Local Vocational Education Programs  
Day School  
Fall Quarter '89

Procedures and experience in use of instruments for conducting program evaluations for teachers, administrators, and state department personnel. Krueger. (35%)

VoEd 5900     Using Vocational Education Research  
Day School  
Prereq. admission to grad level program or #  
Summer Session '90

An introduction to the role of vocational education research in professional practice; significant problems of practice for research; alternative modes of research; and synthesis and application of the results of research. Wardlow. (20%)

VoEd 8910     Positivistic Research in Vocational Education  
Day School  
Prereq. VoEd 5900 or equiv, VoEd 8100 or equiv  
Fall Quarter '89, Winter Quarter '90

Assumptions, procedures for, and considerations in planning and conducting positivistic research in vocational education. Lambrecht, Moss. (20%)

